



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/542,181	07/13/2005	Vladimir Pisarski	US03-0013 US2	7816
65913	7590	12/31/2007	EXAMINER	
NXP, B.V. NXP INTELLECTUAL PROPERTY DEPARTMENT M/S41-SJ 1109 MCKAY DRIVE SAN JOSE, CA 95131			LEIBOVICH, YAIR	
			ART UNIT	PAPER NUMBER
			4193	
			NOTIFICATION DATE	DELIVERY MODE
			12/31/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ip.department.us@nxp.com

Office Action Summary	Application No. 10/542,181	Applicant(s) PISARSKI, VLADIMIR	
	Examiner YAIR LEIBOVICH	Art Unit 4193	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 1/16/2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>12/20/2007</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

2. Claims 10, 12, 14-19, and 25-27 are rejected under 35 U.S.C. 102(a) as being anticipated by Hatonen (US 2004/0039968 A1).

3. For claim 10, Hatonen teaches, a method of controlling a trustworthy-measure associated with a source node in a distributed network (see paragraph [0028] lines 8-10), comprising: receiving, from a reporting node, a report of a modification or corruption of an information file by the source node (see [0020]), determining a validity of the report (see paragraphs [0021-0022]), and degrading the trustworthy-measure associated with the source node when the report is determined to be valid (see paragraph [0025], and [0028]).

For claim 12, Hatonen further teaches: degrading a trustworthy-measure associated with the reporting node when the report is determined to be invalid (see [0025] line 6-8: Examiner holds that increasing, or decreasing the value of a KPI, Key Performance Indicator, is inherently the same as updating the trust measure).

For claim 14, Hatonen further teaches: determining the validity of the report includes notifying the source node of the report (Examiner holds that source node notification of an error **report** is inherently indicative that source node has administrative capabilities,

and therefore is also an administrator node. As an observable **administrative** object of the network, providing and responding to observable **administrative service** objects, it is prone to parameter detection and error analysis in the same manner), and assessing a response from the source node to determine the validity of the report (see [0015]: repeatedly detected parameters of the source/administrator node, and [0016]: criteria fulfillment).

For claim 15, Hatonen teaches assessing response includes: determining that the report is valid if the response is a null-response (see [0016]: parameter checked for criteria), or an admittance of effecting the modification or corruption of the information (see [0016]: parameter checked for criteria), and revising the report to identify an alternative source of the modification or corruption of the information (see [0021], and [0022], learning and analyzing processes) if the response includes an acknowledgement of the modification or corruption (see formed vector [0017] depending on the definitions and results).

For claim 16, Hatonen teaches: assessing the response includes assessing the reliability of at **least one** of: the information file, the source node, and the reporting node (see Figure 3: learning process processes vectors from **multiple** observable objects, and outputs a profile to the analyzing process).

For claim 17, Hatonen teaches: determining the validity (analyzing process [0022]) of the report includes determining a reliability of the source node (see [0025]: KPI), and determining the reliability of the source node is based on(see [0022]: analysis) at least one of: the trustworthy-measure of the source node (see [0015]:detected parameter), longevity of the source node within the distributed network (see [0015]: detected

parameter) traffic flow via the source node (see [0023]: Real Time Traffic, RTT, reports), and prior activities of the source node (see [0052]: object profile).

For claim 18, Hatonen teaches: determining the validity of the report also includes determining a reliability of the reporting node (see [0052]: object profile), and determining the reliability of the reporting node is based on at least one of: the trustworthy-measure of the reporting node (see [0025]: KPI), longevity of the reporting node within the distributed network (see [0015]: detected parameter), traffic flow via the reporting node (see [0023]: RTT reports), and prior activities of the reporting node (see [0052]: object profile).

For claim 19, Hatonen teaches: determining the validity of the report includes a verification of prior ownership of the information file (prior ownership verification is a see [0015]: detected parameter in conjunction with criteria fulfillment [0016]).

For claim 25, Hatonen teaches: An administrator node (see title: system and device) in a communications network (see paragraph [0014] line 3) comprising a plurality nodes (see examiner hold in claim 1), that is configured to: receive a discrepancy report from a reporting node (see [0020]), the discrepancy report identifying a source node (monitored object [0014]) and an information file (additional monitored object [0014]), verify the discrepancy report (learning and analyzing processes [0021-0022]), and modify a trustworthy-measure associated at least one node of the plurality of nodes (see [0025]: KPI), based on whether the discrepancy report is valid (see previous steps of learning and analyzing [0021-0022]).

For claim 26, Hatonen teaches: the discrepancy report is based on a comparison of a code computed by the reporting node to an identifying code (see [0016]: checked to fulfill criteria) corresponding to contents of the information file at a prior time (repeatedly detected parameter [0015], and [0019] observation period predetermined), the administrator node is configured to verify (see [0016]: parameter checked) the discrepancy report by: receiving the information file from the source node, and determining a verification code based on received content of the information file, and comparing the verification code to the identifying code (see paragraphs [0016-0018]: verification process. Examiner asserts that repeatedly detecting codes on the observable object/service, learning, and analyzing them is inherently the same as computing, and verifying associated, identifying and verification codes).

For claim 27, Hatonen teaches: the administrator node is configured to verify (analyzing and learning processes (see [0021-0022]) the discrepancy report based on at least one of: a reliability of the received content of the information file (see [0025]: KPI), a record of prior ownership of the information file (see [0015]: detected parameter), a reliability of the source node (see [0052]: object profile), a reliability of the reporting node (see [0052]: object profile), a longevity of the source node within the network (see [0015]: detected parameter), a longevity of the reporting node within the network (see [0015]: detected parameter), prior activities of the source node within the network (see [0052]: object profile), and prior activities of the reporting node within the network ((see [0052]: object profile; all profiles depend on user definable predetermined criteria).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-4, 11, and 20-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hatonen (US 2004/0039968 A1) in view of Jalali (US 6,694,469 B1).

For claim 1,

- Hatonen teaches, a method of affecting a trustworthy-measure associated with a source node (Examiner holds that any network has two or more nodes wherein at least one node is a source node and an other node is a target node for the purpose of sending and receiving information files), in a distributed network (see paragraph [0014] line 3), comprising: receiving an information file from the source node (see paragraph [0019] line 3: the function of receiving is a service, and the source node is a network element or subscriber), and a corresponding identifying code (see [0015]: detected parameter) that is based on content of the information file (see [0015] the parameter corresponds to the service/ observable object) when the information file is introduced to the network (see [0015] : “repeatedly”, and [0019]: observation period is predetermined), comparing the associated code with the identifying code (see [0016]: parameter is checked for criteria fulfillment); and transmitting an error report (see paragraph [0009,0099,0023,0046]:RTT reports) to an administrator node (see paragraph [0020]; Examiner holds that any network has administrative tasks which,

are either split between the nodes or performed by a dedicated administrator node or both), identifying the source node and the information file (see [0019]) lines 5-7), when at least one of the following occur: the associated code does not correspond to the identifying code (see [0016,0019]: predetermined criteria), and the content of the information file is abnormal (see page 2 paragraph [0022]); thereby facilitating a reduction of the trustworthy-measure associated with the source node (see [0025]: quality of service measure).

- Hatonen does not teach: computing an associated code based on received content of the information file;
- However, Jalali teaches computing an associated code based on received content of the information file (see abstract lines 8-10).
- It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Hatonen to include computing an associated code, as taught by Jalali, to provide enhanced means for error detection.

For claim 2,

- The combination of Hatonen and Jalali teaches the limitations of claim 1 for the reasons above, and repeating the receiving, computing, and comparing steps (see [0015, 0082]).
- Hatonen further teaches: repeating the receiving, computing, and comparing steps prior to transmitting the error report (see [0056, 0057, 0082]).

For Claim 3

- The combination of Hatonen and Jalali teaches the limitations of claim 1 for the reasons above;
- Hatonen does not teach identifying code includes at least one of: a control-sum-code and a hash-value.
- However, Jalali teaches: identifying code includes at least one of: a control-sum-code and a hash-value (see abstract lines 7-9).
- It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Hatonen to include identifying control-sum-code or hash values, as taught by Jalali, for the purpose of adding reliability measures thereby enhancing system reliability.

For claim 4,

- The combination of Hatonen and Jalali teaches the limitations of claim 1 for the reasons above.
- Hatonen teaches: error report includes the associated code and the identifying code (see [0021]: the vector and at least one previous input vector, and [0046] line 8).

For claim 11,

- Hatonen teaches the limitations of claim 10 for the reasons above;
- Hatonen further teaches: determining the validity of the report includes: receiving, from the source node the information file (see paragraph [0019] line 3: the function of receiving is a service, and the source node is a network element or subscriber), and a corresponding identifying code (see [0015] the parameter corresponds to the

service/ observable object) that is based on content of the information file when the information file is introduced to the network (see [0015] : “repeatedly”, and [0019]: observation period is predetermined), comparing the verification code with the identifying code (see [0016]: parameter is checked for criteria fulfillment).

- Hatonen does not teach computing a verification code based on received content of the information.
- However, Jalali teaches: computing a verification code based on received content of the information (see abstract lines 8-10).
- It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Hatonen to include computing an associated code, as taught by Jalali, to provide enhanced means for error detection.

For claim 20,

- Hatonen teaches: A communications network (see paragraph [0014] line 3), comprising: a plurality nodes, including at least a source node, a target node, and an administrator node (see examiner hold in claim 1), the source node having an information file (see [0014]: observable object), and a corresponding identifying code based on content of the information file (see [0015]: repeatedly detected parameter) at a prior point in time (see [0019]: observation period is predetermined), the target node being configured to: receive the information file and identifying code (inherent to the function of a network), transmit a discrepancy report (see paragraph 0009,0099,0023,0046]:RTT reports) based on at least one of: a discrepancy between the identifying code and a computed code based on received content of the

information file (see [0016]: parameter is checked for criteria fulfillment), and an abnormality in the information file (see page 2 paragraph [0022]), and the administrator node (The system and device as a whole, see title) being configured to: receive the discrepancy report (see [0020]), and modify a trustworthy-measure (see [0025]: KPI) associated with at least one node of the plurality of nodes (see figure 1: NE(i)) based on the discrepancy report (see [0021-0022]: learning and analyzing processes).

- Hatonen does not teach computed code based on received content of the information file.
- However, Jalali does teach computed code based on received content of the information file (see abstract lines 8-10).
- It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Hatonen to include computing an associated code, as taught by Jalali, to provide enhanced means for error detection.

For claim 21,

- The combination of Hatonen and Jalali teaches the limitations of claim 20 for the reasons above.
- Hatonen Further teaches: the administrator node is further configured to verify the discrepancy report (see [0021], and [0022], learning and analyzing processes) prior to modifying the trustworthy-measure (see 0082)).

For claim 22,

- The combination of Hatonen and Jalali teaches the limitations of claim 21 for the reasons above.
- Hatonen Further teaches: the administrator node is configured to verify the discrepancy report (see [0015-0022]: detect, check, learn, and analyze) by receiving the information file from the source node (observable service object [0014]), and determining a verification code based on received content of the information file (see [0016]: the repeatedly detected parameter), and comparing the verification code to the identifying code (see [0021, 0022]: learning and analyzing processes).

For claim 23,

- The combination of Hatonen and Jalali teaches the limitations of claim 21 for the reasons above.
- Hatonen Further teaches, the administrator node is configured to verify the discrepancy report (see learning and analyzing processes [0021-0022]) based on at least one of:

a reliability of the received content of the information file, a record of prior ownership of the information file, a reliability of the source node , a reliability of the reporting node, a longevity of the source node within the network, a longevity of the reporting node within the network, prior activities of the source node within the network, and prior activities of the reporting node within the network (Examiner holds that all specified limitations are pre-defined, and are obtained from: RTT reports as UDP

messages, see [0046], defined as KPIs as in [0025] or, obtained from the product of learning and analysis forming the object profile as in [0052]).

6. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Hatonen (US 2004/0039968 A1), and Jalali (US 6,694,469 B1), in view of Earl (US 2003/0233594 A1).

For claim 24,

- The combination of Hatonen and Jalali teaches the limitations of claim 23 for the reasons above.
- The combination of Hatonen and Jalali does not teach: trustworthy-measure of the source node is available for access by each of the plurality of nodes, to facilitate control of subsequent distribution of files from the source node based on the trustworthy-measure.
- However, Earl teaches: trustworthy-measure of the source node is available for access by each of the plurality of nodes (see [0005]), to facilitate control of subsequent distribution of files from the source node based on the trustworthy-measure (inherent: see examiner hold in claim 13).
- It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Hatonen to include trust measure availability to all nodes, as taught by Earl, to provide increased reliability of error detection and to prevent trust measure expiration.

7. Claims 5-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Earl (US 2003/0233594 A1) in view of Hatonen (US 2004/0039968 A1).

For claim 5,

- Earl teaches a method of facilitating control of distribution of modified or corrupted files in a distributed network (see abstract), comprising : providing a catalog of available files to nodes of the distributed network (see paragraph [005]), the catalog identifying each file of the available files and a corresponding source node of each file (see figure 2B), degrading a trustworthy-measure of at least one node of the distributed network based on the error report (see [0012]), and providing the trustworthy-measure of the at least one node to other nodes of the distributed network (see abstract, and [0054 lines 3-7]).
- Earl does not teach processing an error report from a target node that received a downloaded file from a selected source node, and verifying the error report.
- However, Hatonen teaches processing and verifying the error report (see paragraphs [0020-0022], and [0051-0057])
- It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Earl to include verifying and processing the error report, as taught by Hatonen, for the purpose of increasing reliability of error detection, and diagnostic depth.

For claim 6,

- The combination of Earl and Hatonen teaches the limitations of claim 5 for the reasons above.

Art Unit: 4193

- Hatonen does not teach: catalog includes a parameter that is based on the trustworthy-measure of each source node.
- Earl teaches: catalog includes a parameter that is based on the trustworthy-measure of each source node (See Figure 2B key field 204)
- It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Hatonen to include catalog that includes a parameter that is based on the trustworthy-measure of each source node, as taught by Earl, to enhance the control over the trust measure.

For claim 7,

- The combination of Earl and Hatonen teaches the limitations of claim 5 above.
- Earl does not teach that the error report is based on at least one of: a modification of an original version of the downloaded file, and an abnormality associated with the downloaded file.
- Hatonen teaches including an error report based on at least one of: a modification of an original version of the downloaded file, and an abnormality associated with the downloaded file (see abstract and title).
- It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Earl to include error report is based on at least one of: a modification of an original version of the downloaded file, and an abnormality associated with the downloaded file, as taught by Hatonen, to provide a reliable cause of failure.

Art Unit: 4193

For claim 8,

- The combination of Earl and Hatonen teaches the limitations of claim 5 above.
- Earl does not teach: verifying the error report is based upon an identifying code corresponding to an original version of the downloaded file.
- However, Hatonen teaches: verifying the error report is based upon an identifying code corresponding to an original version of the downloaded file (see Hatonen paragraphs [0015-0018]).
- It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Earl to include an error report is based on an identifying code, as taught by Hatonen, to provide enhanced error data sharing.

For claim 9,

- The combination of Earl and Hatonen teaches the limitations of claim 8 above.
- Earl further teaches: catalog includes the identifying code (see Earl Figure 2B).

8. Claims 13, 24, 28, and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hatonen (US 2004/0039968 A1) in view of Earl (US 2003/0233594 A1).

For claim 13,

- Hatonen teaches the limitations of claim 10 for the reasons above.
- Hatonen does not teach: allowing the trustworthy-measure to be accessed by other nodes in the distributed network, to influence subsequent requests for material from the source node, based on the trustworthy-measure.

Art Unit: 4193

- However, Earl teaches: allowing the trustworthy-measure to be accessed by other nodes in the distributed network (see title and abstract: state and operability), to influence subsequent requests for material from the source node, based on the trustworthy-measure (Examiner holds that obtaining state and trust measures about other components in the network is inherently for the purpose of being influenced by that information).
- It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Hatonen to include: allowing other nodes to access trust measure to avoid quality of service reduction.

For claim 28,

- Hatonen teaches the limitations of claim 25 for the reasons above.
- Hatonen does not teach: administrator node is further configured to provide a catalog that identifies a plurality of information files and corresponding source nodes.
- However, Earl teaches: administrator node is further configured to provide a catalog that identifies a plurality of information files and corresponding source nodes [see [0005] and figure 2B).
- It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Hatonen to include the catalog, as taught by Earl, to improve the means for identifying quality of service of nodes.

For claim 29,

- The combination of Hatonen and Earl teaches the limitations of claim 28 for the reasons above.

Art Unit: 4193

- Hatonen does not teach: catalog further includes a parameter based on the trustworthy-measure of the at least one node.
- However, Earl teaches: catalog further includes a parameter based on the trustworthy-measure of the at least one node (see Earl Figure 2B).
- It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Hatonen to include: node specific trust parameters, to provide means for improving control over trust measures.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

- US 6,192,483 B1 (Moiin et al: Data Integrity and availability in a distributed computer system).
- US 7,039,827 B2 (Meyer et al: Failover processing in a storage system).
- US 7,137,060 B2 (Yu et al: Forward Error Correction Apparatus and Method in a High Speed Data Transmission System).
- US 2004/0054776 A1 (Klotz et al: Network Expert Analysis Process).
- US 5,519,830 B1 (Opoczynski: Point to Multipoint Performance Monitoring and Failure Isolation System).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to YAIR LEIBOVICH whose telephone number is (571)270-3796. The examiner can normally be reached on Monday-Thursday 6:30AM to 5:00PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Long Nguyen can be reached on (571)272-1753. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

Art Unit: 4193

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Y.L.

/DANIEL PAN/

Primary Examiner